

Remarks

Reconsideration of this Application is respectfully requested. Claims 1-15 are currently pending.

The Applicant wishes to thank the Examiner for the courtesy of the telephone interview on September 30, 2003 to clarify the issued Office Action (Paper No. 10). As the Examiner will recall, the discussion related to the differences between the claimed invention and the prior art.

Drawing Objections

The Office Action objected to the drawings under 37 C.F.R. 1.84(p)(5) for a minor informality. The Applicant has carefully reviewed and corrected the drawings in red ink and attached herewith along with the Reply. Accordingly, the Applicant respectfully requests that the objection be withdrawn.

Rejections Under 35 U.S.C. §103(a)

The Office Action rejected claims 1, 2, 9, 11, and 12 under 35 U.S.C. §103(a) as being allegedly unpatentable over Smith et al. U.S. Patent No. 6,069,421 (“Smith”) and in view of Grosh et al. U.S. Patent No. 3,470,917 (“Grosh”). The Applicant respectfully traverses the rejection.

Claims 1, 2, 9, 11 and 12 recite, *inter alia*, an electric motor that includes a first liquid barrier comprising at least one layer of polymeric resin material containing reinforcing fibers and

a second liquid barrier comprising of at least one layer of polymeric resin material containing reinforcing fibers.

The Office Action correctly notes that Smith fails to teach or suggest a composite lamina arrangement comprising a first barrier, a strength element, and a second liquid barrier (see Office Action, §3). The Office Action then relies on Grosh to teach the first barrier, the strength element, and the second liquid barrier by relying on the veil cloth (26), layer of filaments (21), an annular disposed filaments preferably made of fiber glass (22), and a layer composed of larger particles and smaller particles. More specifically, from the Examiner interview, Grosh is alleged to teach the veil cloth and layer of filaments as the first liquid barrier; the annular disposed filaments as the strength element; the layer composed of larger and smaller particles as the second liquid barrier. Thus, it is alleged that it would have been obvious to combine the teachings of both references at the time of the invention to arrive at the claimed invention in order to create a structure capable of withstanding internal and external pressure loads (see Office Action, pg. 3, §3). The Applicant respectfully disagrees.

In fact, Grosh fails to teach or suggest a first liquid barrier which is impervious to liquids comprising at least one layer of polymeric resin material containing reinforcing fibers as recited by claims 1, 2, 9, 11, and 12. Instead, Grosh teaches a method of fabricating reinforced piping. Grosh also teaches a mandrel is used to create the pipe fitting a veil cloth and then a longitudinal fibers over the veil cloth (Grosh, col. 4, lines 9-11). Grosh further teaches that applying a layer of large particles on a band of filaments wet with resin material (Grosh, col. 3, lines 25-26; 43-47). Then, a layer of small particles is applied to the layer of large particles to fill in the gaps created by the large particles (Grosh, col. 3, lines 61-66), and thereby creating a reinforced pipe.

However, Grosh fails to teach or suggest that polymeric resin material containing reinforcing fibers. Instead, Grosh merely teach longitudinal fibers where resin material is then placed on top of the longitudinal fibers and then cured. As such, the resin material and the longitudinal fibers are two separate materials. In contrast, the claims 1, 2, 9, 11, and 12 require that the polymeric resin material contain the reinforcing material. Accordingly, Grosh fails to teach or suggest a polymeric resin material containing reinforcing fibers but rather fibers with a resin material surrounding the fibers. Thus, Grosh fails to teach the invention as recited by claims 1, 2, 9, 11, and 12.

Moreover, the Office Action has alleged that the layer of larger and smaller particles reads upon the second liquid barrier (see pg. 3, §3). The Applicant respectfully disagrees.

Grosh also fails to teach or suggest a second liquid barrier comprising at least one polymeric resin material containing reinforcing fibers as recited by claims 1, 2, 9, 11, and 12. Rather, Grosh suggests using particulate matter of two different sizes to provide a strengthening material for a pipe. Particulate matter is not a reinforcing fiber much less a polymeric resin material containing reinforcing fibers.

Furthermore, Smith and Grosh are non-analogous art. More particularly, Smith teaches a submersible electric motor. Grosh teaches a method of constructing a pipe utilizing filaments, resin and sand. Clearly, a submersible electric motor and reinforcing pipe are non-analogous art. As such, one of ordinary skill in the art of submersible electric motors would not look to the art of reinforced pipe. Accordingly, it is respectfully submitted Smith and Grosh are not properly combinable with respect to claims 1, 2, 9, 11, and 12 and were only combined with

impermissible hindsight. *See In re McLaughlin*, 443 F.2d 1392, 1395, 170 U.S.P.Q. 209, 212, (CCPA 1971).

The Office Action rejected claims 6-8 under 35 U.S.C. §103(a) as being allegedly unpatentable over Smith in view of Grosh and in further view of Junpei et al. U.S. Patent No. 3,577,024 (“Junpei”).

Claims 6-8 recite, *inter alia*, an electric motor that includes a first liquid barrier comprising at least one layer of polymeric resin material containing reinforcing and a second liquid barrier comprising of at least one layer of polymeric resin material containing reinforcing fibers.

As described above, Smith and Grosh fail to disclose, teach or suggest the claimed invention. Junpei also fails to rectify the deficiencies of Smith and Grosh. More particularly, Junpei fails to suggest or teach a first and second liquid barrier comprising of at least one layer of polymeric resin material containing reinforcing fibers.

Instead, Junpei suggests that a pair of oppositely directed helical grooves are formed on the peripheral surface of a rotor (Junpei, col. 1, lines 43-44). Junpei also suggests that the grooves create component of forces tending to push back cooling liquid (Junpei, col. 1, lines 47-48). However, Junpei fails to teach or suggest a first and second liquid barrier comprising of at least one layer of polymeric resin material containing reinforcing fibers. Accordingly, Junpei, alone or in combination, fails to teach or suggest each and every claim element of the invention as recited by claims 6-8 and it is, therefore, respectfully submitted that the invention as recited by claims 6-8 is patentable over the cited prior art.

The Office Action rejected claim 10 under 35 U.S.C. §103(a) as being allegedly unpatentable over Smith in view of Grosh and in further view of Van Dine et al. U.S. Patent No. 6,542,301 (“Van Dine”).

Claim 10 recites, *inter alia*, an electric motor that includes a first liquid barrier comprising at least one layer of polymeric resin material containing reinforcing and a second liquid barrier comprising of at least one layer of polymeric resin material containing reinforcing fibers.

As described above, Smith and Grosh fail to disclose, teach or suggest the claimed invention. Van Dine also fails to rectify the deficiencies of Smith and Grosh. More particularly, Van Dine fails to suggest or teach a first and second liquid barrier comprising of at least one layer of polymeric resin material containing reinforcing fibers.

Rather, Van Dine suggests a method of attaching magnets in a rotor (Van Dine, abstract). More particularly, Van Dine suggests that a permanent magnet rotor having a rim member (Van Dine, col. 1, line 63). Van Dine also suggests that array of pole pieces are attached to the rim member (Van Dine, col. 1, lines 63-65). However, Van Dine fails to teach or suggest a first and second liquid barrier comprising of at least one layer of polymeric resin material containing reinforcing fibers. Accordingly, Van Dine, alone or in combination, fails to disclose, teach, or suggest the invention as recited by claim 10 and it is, therefore, respectfully submitted that the invention as recited by claim 10 is patentable over the cited prior art.

The Office Action rejected claims 3, 5, 13, and 15 under 35 U.S.C. §103(a) as being allegedly unpatentable over Smith in view of Grosh and in further view of Sadler et al. U.S. Patent No. 4,450,873 (“Sadler”).

Claim 3, 5, 13, and 15 recites, *inter alia*, an electric motor that includes a first liquid barrier comprising at least one layer of polymeric resin material containing reinforcing and a second liquid barrier comprising of at least one layer of polymeric resin material containing reinforcing fibers.

As described above, Smith and Grosh fail to disclose, teach or suggest the claimed invention. Sadler also fails to rectify the deficiencies of Smith and Grosh. More particularly, Sadler fails to suggest or teach a first and second liquid barrier comprising of at least one layer of polymeric resin material containing reinforcing fibers.

Instead Sadler suggests a reinforced plastic pipe (Sadler, abstract). Sadler suggests that the pipe is constructed by wrapping a fibrous sheet saturated with uncured resin around a mandrel (Sadler, col. 2, lines 59-61). Sadler also suggests that additional layers of glass filaments are wrapped around the mandrel and then an acid resistant resin is applied to the layers (Sadler, col. 2, lines 62-66). However, Sadler fails to teach or suggest a first and second liquid barrier comprising of at least one layer of polymeric resin material containing reinforcing fibers. Accordingly, Sadler fails to disclose, teach or suggest the invention as recited by claims 3, 5, 13, and 15 and it is respectfully submitted that the invention as recited by 3, 5, 13, and 15 is patentable over the cited prior art.

Conclusion

All of the stated grounds of objection and rejection have been properly traversed, accommodated, or rendered moot. Applicant therefore respectfully requests that the Examiner reconsider all presently outstanding objections and rejections and that they be withdrawn.

Applicant believes that a full and complete response has been made to the outstanding Office Action and, as such, the present application is in condition for allowance. If the Examiner believes, for any reason, that personal communication will expedite prosecution of this application, the Examiner is invited to telephone the undersigned at the number provided.

Prompt and favorable consideration of this Reply is respectfully requested.

Respectfully submitted,



Michael J. Bell (Reg. No. 39,406)
Anderson I. Chen (Reg. No. 44,436)

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HOWREY SIMON ARNOLD & WHITE, LLP
Box No. 34
1299 Pennsylvania Avenue, N.W.
Washington, D.C. 20004-2402
(202) 783-0800